

KLEEN-FLO TUMBLER INDUSTRIES LIMITED			MATERIAL SAFETY DATA SHEET		PAGE 1
SECTION I-MATERIAL IDENTIFICATION AND USE					
Material Name/Identifier:	Kleen-Flo Engine Shampoo	Stock No.	645/646/649		
Manufacturer's Name:	Kleen-Flo Tumbler Industries Ltd	Street Address:	75 Advance Blvd.		
City:	Brampton	Province:	Ontario		
Postal Code:	L6T 4N1	Emergency Phone #:	CANUTEC:- 613-996-6666 (24HR)		
Chemical Name:	N/A (mixture)	Chemical Family:	Petroleum Distillate		
Chemical Formula:	N/A (mixture)	Trade Names & Synonyms:	None		
Material Use:	Machine parts cleaner	Molecular Weight:	N/A		
SECTION II-HAZARDOUS INGREDIENTS OF MATERIAL					
Hazardous Ingredients	C.A.S.	Approximate Concentration (%)	LD50 Species & Route	LC50 Species & Route	
Petroleum Distillate	68476-30-2	10-30	> 5 g/kg rat-oral	> 5000 mg/m3 rat (4 hr)	
Stoddard Solvent	8052-41-3	60-100	> 5 g/kg rat oral	> 5 g/kg rat	
Alcohol Ethoxylated	68439-46-3	1- 5	1400 mg/kg rat-oral	N/Av.	
Alcohol, C12-13, Ethoxylated	66455-14-9	0.1 - 1	N/Av.	N/Av.	
SECTION III-PHYSICAL DATA FOR MATERIAL					
Physical State:	Liquid	Odour/Appearance:	Pine odour/ clear, red liquid		
Specific Gravity:	0.8	Odour Threshold(p.p.m.):	N/E		
Boiling Point:	150-300°C	Evaporation Rate:	N/E		
Freezing Point:	N/Av.	Solubility in Water:	Partial soluble (emulsion)		
% Volatile(by volume):	N/E	Vapour Pressure(mm)Hg:	N/E		
Vapour Density(Air=1):	N/Av.	Coefficient of Water/Oil Distribut:	N/Av.		
pH	N.Ap.				
SECTION IV-FIRE AND EXPLOSION HAZARD OF MATERIAL					
Flammability Yes/No	Yes	If yes under which conditions?:	Combustible liquid		
Auto Ignition Temperature:	N/E	Means of Extinction:	Carbon dioxide foam, dry chemical, water fog		
Flashpoint and Method:	Tag c.c 47°C	Hazardous combustion products:	Carbon dioxide, Carbon monoxide		
* NOTE: Do not apply to hot surfaces. It may catch fire.			Aldehydes, Sulfur dioxide, Hydrocarbon fumes, smoke.		
Upper Flammable limit (%vol)	N/Av.	Lower Flammable Limit(% by volume):	N/Av.		
Explosion Data:	Sensitivity to Mechanical Impact: Yes	Sensitivity to Static Discharge: Yes	Use well grounded tools		
SECTION V-REACTIVITY DATA					
Chemical Stability Yes/No:	Yes	If NO under which conditions?	N/A		
Incompatibility to Other Substances Yes/No:	Yes	If so which ones?	Strong oxidizing agents		
Reactivity and under what conditions?	Do not use on hot surface/engines. It may cause spontaneous ignition.				
Hazardous Decomposition Products:	Carbon monoxide, carbon dioxide,Aldehydes, Sulfur dioxide, Smoke				
N/E: not established					
N/Av.: not applicable					
N/Av.: not available					

Material Name/Identifier: Kleen-Flo Engine Shampoo		Stock No. 645/646/649	PAGE 2
SECTION VI-TOXICOLOGICAL PROPERTIES OF PRODUCT			
Route of Entry: ALL Routes	--SKIN CONTACT --SKIN ABSORPTION --EYE CONTACT --INHALATION --INGESTION		
Effects of Acute Exposure:	May cause eye and skin irritation, if aspirated may cause lungs damage.		
Effects of Chronic Exposure:	Prolonged exposure to high vapor concentration can cause headaches, dizziness, nausea & other central nervous system effects. Small amount of liquid aspirated in to lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema. Prolong and repeated contact with skin cause defatting and drying of the skin resulting in skin irritation and dermatitis.		
LD 50 of Product:	N/E	LC 50 of Product:	N/E
Irritancy of Product:	May cause eye, skin irritant	Exposure Limits of Product:	
		ACGIH: Stoddard solvent: 100 ppm TLV	
Sensitization of Product:	N/Av.	Toxicologically Synergistic Materials:	N/Av.
--CARCINOGENICITY --REPRODUCTIVE EFFECTS --TERATOGENICITY --MUTAGENICITY			None known
SECTION VII-PREVENTIVE MEASURES			
Personal Protective Equipment to be used:			
Gloves(specify):	Chemical resistant gloves	Eye(specify):	Safety goggles
Respiratory(specify):	NIOSH- Organic vapour Mask	Clothing:	Not required
Respiratory Protection:	If used indoors or on a continuous basis, use of NIOSH approved cartridge type respirator is recommended		
Engineering Controls:	Local and mechanical ventilation required to maintain Exposure limit threshold..		
	Local desirable. To maintain below TLV, electrical and mechanical equipment should be spark-proof.		
Leak and Spill Procedure:	Contain spill, use with inert absorbent materials and non sparking tools. Prevent entering to waterways.		
Waste Disposal:	Dispose off according to municipal, provincial or federal regulation.		
Storage Requirements:	Store at room temperature, well ventilated area. Keep away from openflame, hot surface, source of ingintion.		
	Keep container closed when not in use. Keep away from children.		
Handling Procedures and	Avoid prolonged or repeated contact with skin. Do not inhale or ingest.		
Equipment:	Handle all chemicals with care. Keep away from children.		
DSL listing	All components are listed in the inventory.		
TDG Classification:	Exempted under part 1, section 1.33 for combustible liquid		
WHMIS Classification:	#645 Consumer Commodity, #646, #649 B3, D2B		
SECTION VIII-FIRST AID MEASURES			
Eye:	Flush with plenty of water for 15 minutes. Consult a physician immediately if discomfort persist.		
Skin:	Remove contaminated clothing. Wash with soap and water. See doctor if irritation or ras		
Inhalation:	Move patient to fresh air and restore breathing if required. See doctor if discomfort persist.		
Ingestion:	DO NOT INDUCE VOMITING. Seek medical help immediately.		
SECTION IX-PREPARATION DATE OF M.S.D.S.			
Additional Info/Comments:		Sources Used:	Supplier's technical data
Phone Number:	(905) 793-4311	Prepared By:	Quality Control Laboratory
Date Prepared :	January 2, 2015	Kleen-Flo Tumbler Industries Limited	
THIS SHEET SUPERSEDES ANY OTHER M.S.D.S. PREVIOUSLY PREPARED			
N/Av.: not available		N/Av.: not applicable	
		N/E: not established	